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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,599	12/04/2003	Yong Yang	11419-003-999	2559

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EXAMINER

RONESI, VICKEY M

ART UNIT PAPER NUMBER

1714

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/728,599

Applicant(s)

YANG ET AL.

Examiner

Vickey Ronesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 58-79, 82-90 and 93-101 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 58-79, 82-90 and 93-101 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>S-2-06</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/2/2006 has been entered.
2. All outstanding objections and rejections, except for those given below, are withdrawn in light of applicant's amendment filed on 5/2/2006.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

***Claim Rejections - 35 USC § 112***

4. Claims 95 and 96 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 95 is dependent on canceled claim 92. In the interest of compact prosecution, the claim has been examined as if dependent on claim 89.

With respect to claim 96, it is rejected for being dependent on a rejected claim.

***Claim Rejections - 35 USC § 102/103***

5. Claims 58-62, 65, 68-71, 74, 78, 79, and 81-88 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sonnabend (US 4,384,096).

The rejection is adequately set forth in paragraph 6 of Office action mailed 12/27/2005 and is incorporated here by reference.

6. Claims 58-62, 65, 68-71, 74, 78, 79, 81, 82, and 84-88 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hawe et al (US 4,892,916, cited on IDS filed 12/4/2004).

The rejection is adequately set forth in paragraph 7 of Office action mailed 12/27/2005 and is incorporated here by reference.

7. Claims 58-65, 68-74, and 78-88 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chang et al (US 4,138,381, cited on IDS filed 12/4/2004).

The rejection is adequately set forth in paragraph 8 of Office action mailed 12/27/2005 and is incorporated here by reference.

***Claim Rejections - 35 USC § 103***

8. Claims 89, 90, and 93-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonnabend (US 4,384,096).

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The discussion with respect to Sonnabend in paragraph 5 above is incorporated here by reference.

While Sonnabend fails to exemplify a copolymer with (meth)acrylic acid, alkyl methacrylate (i.e., ethyl methacrylate), vinyl acetate, and a surfactant monomer containing an alkylphenyl moiety, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to utilize the presently claimed combination of comonomers given that Sonnabend teaches each one (in particular, preferably (meth)acrylic acid, vinyl acetate, and alkylphenoxy poly(ethyleneoxy) ethyl acrylates).

9. Claims 89, 90, 93, and 95-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawe et al (US 4,892,916, cited on IDS filed 12/4/2004).

The discussion with respect to Hawe et al in paragraph 6 above is incorporated here by reference.

While Hawe et al fails to exemplify a copolymer with (meth)acrylic acid, alkyl methacrylate (i.e., ethyl methacrylate), vinyl acetate, and a surfactant monomer containing an alkylphenyl moiety, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to utilize the presently claimed combination of comonomers given that Sonnabend teaches each one (in particular, preferably (meth)acrylic acid, C<sub>1</sub>-C<sub>4</sub> alkyl (meth)acrylates, and octylphenyl functionalized surfactant monomer), including vinyl acetate.

10. Claims 89, 90, and 93-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (US 4,138,381, cited on IDS filed 12/4/2004).

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The discussion with respect to Chang et al in paragraph 7 above is incorporated here by reference.

While Chang et al fails to exemplify a copolymer with (meth)acrylic acid, more than one vinyl ester monomer, and a surfactant monomer containing an alkylphenyl moiety, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to utilize the presently claimed combination of comonomers given that Chang et al teaches each one (in particular, preferably (meth)acrylic acid, alkyl (meth)acrylates, and alkylphenoxy poly(ethyleneoxy) ethyl acrylates) and further teaches at least one alkyl (meth)acrylate.

11. Claims 58-60, 63-65, 68-69, 72-74, 77-79, 84-90, and 95-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US 5,874,495, cited on IDS filed 10/11/2005).

Robinson discloses a thickener that is a copolymer (abstract, col. 10, lines 15-62) comprising 15-60 wt % acrylic or methacrylic acid or mixtures thereof (col. 4, lines 1-11), 15-80 wt % C<sub>2</sub>-C<sub>12</sub>  $\alpha,\beta$ -ethylenically unsaturated monomer wherein mixtures of ethyl acrylate and vinyl acetate is preferred (col. 4, lines 12-42); and 1-30 wt % ethylenically unsaturated nonionic biphenyl monomer such as tristyrylphenyl poly(ethyleneoxy) methacrylate is preferred (col. 2, lines 41-67). Note that at least one thickener can be used in aqueous coating systems containing pigments and synthetic latex such as those in col. 7, lines 12-23 (col. 6, line 60 to col. 7, line 47).

While Robinson fails to exemplify a color composition or a paint containing its thickener, it is considered that it would have been obvious to one of ordinary skill in the art to utilize the

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thickener in either an aqueous or solvent-based coating composition containing a pigment and a tint base for a paint given that Robinson teaches the use of its thickener in such compositions, whereby the presently claimed properties of relating to viscosity stabilization effects, color changes after rub-up, or flow/level rating of the paint would be intrinsically met.

With respect to claims 77, 89, 100, and 101, while Robinson fails to exemplify a copolymer with (meth)acrylic acid, alkyl methacrylate (i.e., ethyl methacrylate), vinyl acetate, and tristyrylphenylpoly(ethyleneoxy) methacrylate, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to utilize the presently claimed combination of comonomers given that Robinson teaches each one (in particular, preferably (meth)acrylic acid, vinyl acetate, and tristyrylphenylpoly(ethyleneoxy)methacrylate) and there being no expected or surprising results for using ethyl methacrylate over Robinson's preferred ethyl methacrylate.

### ***Response to Arguments***

12. Applicant's arguments filed 5/2/2006 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that transitional claim language "consisting essentially of" excludes a tint base and (B) that a paint made by mixing the colorant composition containing the thickener and a tint base is different from mixing the tint base, the colorant, and the thickener all at once.

With respect to argument (A), first note that Hawe et al explicitly teaches the use of its polymeric thickener in pigment pastes (col. 8, line 51). Second, while it is recognized that the phrase "consisting essentially of" narrows the scope of the claims to the specified materials and

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those which do not materially affect the basic and novel characteristics of the claimed invention, absent a clear indication of what the basic and novel characteristics are, “consisting essentially of” is construed as equivalent to “comprising.” Further, the burden is on the applicant to show that the additional ingredients in the prior art, i.e. latex tint base or binder, would in fact be excluded from the colorant composition claims and that such ingredients would materially change the characteristics of the applicant’s invention, See MPEP 2111.03. Moreover, the statement that a latex or binder is excluded from applicant’s invention is a conclusory statement with no evidentiary weight, i.e., attorney’s statements are not a substitute for factual evidence. Case law holds that “[i]f an applicant contends that additional steps or material in the prior art are excluded by the recitation of ‘consisting essentially of,’ applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant’s invention.” *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). The examples in applicant’s specification as originally filed fails to provide any basis for how the addition of a latex affects basic and novel characteristics of the claimed invention. Without a showing that the initial presence of a binder with the thickener affect the viscosity stabilization properties of a latex paint, weight cannot be given to “consisting essentially of.”

The examiner has considered *In re Herz* and *In re Garnero* regarding “consisting essentially of,” however, the facts in those cases made it clear what the basic and novel characteristics were and how they would be materially affected. In the instant application, applicant claims a colorant composition (where “colorant” is intended use) and only argues (with no evidence) that a tint base or binder is excluded by the phrase “consisting essentially of.”



With respect to argument (B), claim 78, drawn to a latex paint, is a product-by-process claim and therefore “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Given that the prior art teaches mixtures of a tint base, a colorant, and a thickener, it is the examiner’s position that the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim. While applicant argues that the product is different, the examples in applicant’s specification as originally filed fail to provide any criticality for the mixing order.

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/3/2006

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